

In the Specification:

Please amend the Specification as follows:

Page 1, line 4, change ~by light scattered~ to -- by light or laser beam--;

line 9, delete ~using light scattering~;

line 17, change ~'Active'~ to --Active--.

Page 4, line 8, change ~especially~ to --specially--;

line 15, change ~contained in the~ to --characterized by--.

Page 5, line 3, after ~(Microns).~ insert

Other known devices use a fiber optic means for scattered or diffracted light collection (see, for example, U.S. Patents No. 4,595,291, No. 5,325,169, No. 5,619,333 and No. 5,731,875).

Some known devices (for example, by U.S. Patent No. 5,731,875) use a plurality of light emitting lasers intended for the power decreasing, that provides the elimination of the laser heat-sink, but, it requires to use a plurality of fiber optic stands and the optical element(s) for the focusing of a plurality of light beams.

line 7, after ~devices.~ insert

Also the devices, based on scattered light collection and some other detection methods (for example, by light splitting), use a different variations of the analog comparison method for the particle counting and measuring. Such methods can be illustrated, for example, by U.S. Patent No. 4,798,465, wherein is shown the particle size detection device, using one of the particle measuring comparison method variation. The signals from detectors via the amplifiers follow to the comparators, which are connected to the reference voltage means. The amplified detected signal is compared with the predetermined reference voltage for the particle size qualifying.

Such analog methods cannot provide a sufficiently high sensitivity related to the increasing environmental requirements, because of the non-precise analog method of comparison.

Page 6, lines 7, 9, 11, 13, 14 delete ~devices~;

delete line 16 in its entirety and insert therefor

-- device with the divided particle flow tubular means.--;

delete line 18 in its entirety and insert therefor

--device with non-divided particle flow tubular means.--.

Page 7, delete lines 1, 2 in their entirety;

line 3, change ~10~ to --9-- and delete ~of the second variant~;

line 5, change ~11~ to --10--;

line 6, change ~12~ to --11-- and after ~with~ insert --the--;

line 10, delete ~achieving~;

line 16, after ~signals~ insert --,-- and after ~means~ insert --,--;

line 17, change ~processing of the signals~ to --signal processing-- and delete ~display-~;

line 18, change ~ing information.~ to --information displaying.-- and change ~amplitude or~ to --direct detection of the particles and--.

Page 8, delete lines 1-7 in their entirety and insert therefor

By an improved method, the improved timing processing of the detected signals is provided by strobing of the digital form pulses, created from the appropriate amplified detected signals and having the different durations created by appropriate different size particles, intersecting the light beam.

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line 13, change ~Figs.6, 7, 8~ to --Figs.6, 7--;
line 15, after ~tubular~ insert --(capillary)-- and change ~The~ to --For
example, the-- and change ~particles, is~ to --particle passage, can be divided--;
line 16, change ~interrupted~ to --(interrupted)-- and after ~area~ insert
--for the inlet particle flow tubular means and outlet particle flow tubular means--;

line 17, after ~has~ insert --a--.
Page 9, line 3, after ~is~ insert --by a multiplexed bus 25--;
line 4, after ~21~ insert --connected to each other by the multiplexed bus 25.

The terminal means 21 can include at least one of a displaying means, an external control means (for example, a key board), a printing means, a compact disk means, a floppy disk means and an external interface means (all not shown).--;

delete lines 5-8 in their entirety;
line 9, change ~10~ to --9-- and change ~time method processing~ to
--a timing processing--;
line 12, change ~11~ to --10-- and change ~timing diagram~ to
--timing-diagram--;
line 13, change ~12~ to --11-- and change ~,~ to --,--;
line 14, change ~comprises~ to --This device comprises-- and
after ~by~ insert --a-- and after ~optic~ insert --connecting--;
line 15, after ~is~ insert --electrically-- and after ~including~ insert --an

analog-digital subsystem 14 and a control subsystem 13, comprising--

line 16, after ~21.~ insert --The microprocessor subsystem 20 and the
terminal means 21 are connected to each other and to an analog-digital subsystem 14 by the
multiplexed bus 25. The terminal means 21 can include at least one of a displaying means, an
external control means (for example, a key board), a printing means, a compact disk means, a
floppy disk means and an external interface means (all not shown).~

Page 10, line 3, change ~obstructs the light~ to --is an obstruction for the light in the
direction--;
line 4, after ~4.~ insert --The bigger particle, the less light intensity on the

light detection means 4. For other detecting principles (for example, for scattered light
collection by lens or mirror collecting system), the light intensity on the light detection means
(on the light detector) will be presented when the particles intersect the laser beam. The
bigger particle, the higher intensity--

line 5, after ~signals~ insert --,-- and change ~, (see Fig.11a)~ to
--(current signals),-- and after ~follow to~ insert --the amplifying means 15 of--;
line 6, after ~14~ insert --(Fig.9)-- and delete ~As shown on Figs.9,~;
delete lines 7, 8 in their entirety;
delete lines 9, 10 in their entirety and insert therefor

--An improved timing processing method provides the digital processing of the amplified
detected signals (see Fig.10).--

delete lines 11-16 in their entirety;

line 17, change ~10~ to --9-- and delete ~(Fig.11b)~;

line 18, after ~which~ insert --converts them to the voltage signal (Fig.10a),

amplifies these voltage signals (Fig.10b) and-- and after ~digital~ insert --form-- and change
~(Fig.11c)~ to --shown on Fig.10c (the digital form pulses can be presented by digital code
after an analog-digital converter - not shown)-- and delete ~from the analog signals of the--;